

on the COVER





A string of buoys commonly seen in front of water control structures such as pump stations, prevents small vegetation and other surface debris from interfering with pumping efficiency.

Governor Jeb Bush, surrounded by local, state and federal partners, announces an ambitious plan to accelerate eight Everglades restoration projects at the Loxahatchee National Wildlife Refuge.



While the storm raged outside, Fischer was too busy inside to dwell on that. He and his crew had work to do.

Hurricane Frances: 66 hours inside a

pump station
with...

GARY FISCHER
Chief Operator

Regular 12-hour shifts are one thing. A 24-hour double shift is another. But imagine 66 straight hours on the job... locked inside a concrete building... during a hurricane... in the company of just two coworkers and six massive diesel engines, each big enough to power a U.S. Navy ship. The engine noise is deafening, the winds outside are roaring, it's hot, and you're dog-tired. Halfway through, you lose contact with the outside world: no regular phone lines, cell phones or satellite phones to check on your house or family. Your lifelines are two generators that thankfully keep the lights and air conditioning on, a reliable communication connection to managers back at headquarters and the relentless work of keeping the fuel-hungry engines pumping water out of the canal - so more water can flow into them instead of into the roadways and homes of South Florida.

That's how South Florida Water Management District Chief Operator Gary Fischer spent Hurricane Frances. Fischer, Pat Morgan and Walter Betit went into "lock-down" at pump station S-5A on Thursday, Sept. 2, at 6 p.m., not to emerge until Sunday, Sept. 5, at noon. The pump station they kept running sends water from the C-51

canal in West Palm Beach into STA-1 West, one of the six treatment wetlands that provided water storage during Frances' torrential rains. Without steady pumping, stormwater would have overflowed the banks of the C-51 canal, preventing water from flowing in from the secondary and tertiary drainage canals that keep

Palm Beach County from flooding.

While the storm raged outside, Fischer was too busy inside to dwell on that. He and his crew had work to do. Scheduling their time in three-hour blocks – two workers on while the third rested – the team tended the pumps throughout the days and nights of the long-lasting storm. This meant taking hourly readings of oil pressures, cylinder temperatures, water levels, flow rates and other details that must be monitored and

Fischer admitted that while it was stressful to lose outside communication, the only other hardship he mentioned was the bare basic food supplies. "We ate a lot of soup and Cheerios," he said. That can certainly get old after 66 hours straight.

AT THE DISTRICT

Relief for the lockdown crew was difficult to achieve after the worst of the storm passed. Without phone service, the pump operators scheduled for Sunday arrival could not be contacted. What to do? "Knock on doors," Fischer said. That's exactly what happened. Diesel engine operator Luis Bianchi checked houses in Wellington and was able to get a relief crew on the way.

At noon on Sunday, with a replacement team on hand, Fischer headed for home. The short drive took more than an hour because of



Chief operator Gary Fischer manages six giant diesel-driven pumps, helping to move water through the regional flood control canal system. During Hurricane Frances, Fischer and his crew spent 66 straight hours on the job here at pump station S-5A in Loxahatchee. Just a few weeks later, the same well-practiced crew kept the pumps going during Hurricane Jeanne.

maintained to keep the pumps pumping. One of the crew even had to go outside every hour to make sure debris was not blocking the water inflow sites.

Perhaps surprisingly, the mood inside the station was upbeat.

downed trees and power lines. Time for a hot shower? A long nap? "I had a cold beer," Fischer said. He paused. "Actually, I don't think it was cold at all. But it sure tasted that way."



Water Ways of Yesteryear

Hurricanes, circa 1947

The busy hurricane season of 2004 is a vivid reminder of 1947 when two powerful hurricanes struck South Florida – George in September and King in October – and a reminder of the South Florida Water Management District's roots. Hurricane King flooded this home and surrounding field near the present-day Miami International Airport. Pressure from Floridians to receive federal flood-control assistance led to creation in 1949 of the Central and Southern Florida Flood Control District, today known as the South Florida Water Management District. The agency operates and maintains one of the world's largest water management systems, built by the U.S. Army Corps of Engineers starting in 1950, called the Central and South Florida (C&SF) Project. Today, the system includes 1,800 miles of canals, 50 pump stations and 200 water control structures designed to drain floodwaters during times of abundant rainfall, tropical storms and hurricanes. The system was originally built to meet the needs of about two million people; it now serves a population of almost seven million. As a District strategic priority, extensive refurbishment of aging, stressed structures and machinery is under way. With additional water storage to be provided by Everglades restoration projects, the District is prepared to help lessen flooding in South Florida for many decades to come.

Find Freddy!



CLUES:

- Freddy the Friendly Alligator is visiting a facility in a reserve on the Gulf Coast of Southwest Florida. The reserve includes a 110,000-acre sanctuary of mangroves and protected waters at the northern end of Ten Thousand Islands.
- Freddy is learning about the preservation, restoration and management of this mangrove estuary and how research programs aid in monitoring and evaluating the effects of Everglades restoration.
- Inside the facility, Freddy watched scientists at work through lab windows, heard a lecture in the auditorium and went on a guided walk. Then he was ready for a dip in Henderson Creek!

Give up? The answer is on the back page.